

Work Order ID 155572

Tuesday, January 17, 2017 11:27:25 AM

155572

Page 1

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: AS350 Cable Cutter System
Start Date: 1/31/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/7/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: **DAS 21 9-89** Date: **JAN 18 2017** Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.4000	C1	JAN 31 2017	DAS 6 9-89					DAS 21 9-89	1702-31
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 646.4001								DAS 28 9-89 FEB 21 2017
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							DAS 6 9-89 DAS 27 9-89 FEB 01 2017
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									DAS 28 9-89 FEB 21 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
		OTHER : _____			

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001 Location: <u>solid</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.02							
Quality Control									

DAS 28 9-89
DAS 27 9-89

FEB 21 2017

DAS 21 9-89

FEB 21 2017

mr
17-2-21

DQA: _____ Date: _____



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Work Order update only ☐

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Picklist Print

Tuesday, January 17, 2017 11:27:22 AM

Page 1

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM IPP
REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

600.0129

Purchased

No

100

f

192.0000

8

8

600 0129

VHB TAPE 75935A651

**

FEB 01 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK096

192

m135867

192

600.0990

Purchased

No

100

Each

29.0000

1

1

600 0990

Magnabond 6398 Part A Size 112 ml

**

DAS
27
9-89

Location

Loc Qty

Loc Code

PKG

29

M135600

4

M136142

12

M136586

12

M134249

1

1/1/2017

1

1

600.0991

Purchased

No

100

Each

28.0000

1

1

600 0991

Magnabond 6398 Part B Size 112 ml

**

DAS
27
9-89

Location

Loc Qty

Loc Code

PKG

28

m135600

4

m136142

12

m136586

12

05/30/2017

DAS
28
9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
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247 72 88-7				Completed By	
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Picklist Print

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Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

600.1012 Purchased No

100 Each 19.0000 1 1

600 1012

Sealant PR1425B2 (#654 sem)

DAS
28
9-89

**

DAS
6
9-89

DAS
27
9-89

FEB 0 1 2017

Location

Loc Qty

Loc Code

cck017

19

m136192

3

m136554

8

m136586

8

600.1013 Purchased No

100 Each 85.0000 5 5

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

DAS
28
9-89

**

DAS
6
9-89

DAS
27
9-89

FEB 0 1 2017

Location

Loc Qty

Loc Code

CCK096

85

m136345

85

646.2910 Manufactured No

100 Each 8.0000 1 1

646 2910

Deflector

DAS
28
9-89

**

DAS
6
9-89

DAS
27
9-89

FEB 0 1 2017

Location

Loc Qty

Loc Code

CCK050

8

150611

2

151647

6

646.3001 Manufactured No

100 Each 6.0000 1 1

646 3001

Lower Cable Cutter Assembly

DAS
28
9-89

**

DAS
6
9-89

DAS
27
9-89

FEB 0 1 2017

Location

Loc Qty

Loc Code

cck018

3

151616

1

151686

2

ST018

3

151685

3

151685

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Shop Packet Print

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OTHER : _____					

Picklist Print

Tuesday, January 17, 2017 11:27:22 AM

Page 6

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

646.3716

Manufactured No

100

Each

13.0000

1 1

646 3716

Gauge Bracket

**

FEB 0 1 2017

DAS

27

9-89

Location

Loc Qty

Loc Code

cck105

13

140845

13

646.3717

Manufactured No

100

Each

11.0000

1 1

646 3717

Doubler

**

FEB 0 1 2017

DAS

27

9-89

Location

Loc Qty

Loc Code

cck105

11

142634

1

151423

10

646.3718

Manufactured No

100

Each

9.0000

2 2

646 3718

Custom Washer

**

FEB 0 1 2017

DAS

27

9-89

Location

Loc Qty

Loc Code

cck105

9

151498

9

646.3719

Manufactured No

100

Each

12.0000

2 2

646 3719

Doubler

**

FEB 0 1 2017

DAS

27

9-89

Location

Loc Qty

Loc Code

cck105

12

150656

2

151663

10

Tuesday, January 17, 2017 11:27:23 AM

Shop Packet Print

Page 6

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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OTHER : _____																					

Picklist Print

Tuesday, January 17, 2017 11:27:23 AM

Page 8

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

646.3910

Manufactured No

100

Each

33.0000

4

4

646 3910

Shim

**

FEB 0 1 2017

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK106

13

150627

13

CCK108A

20

151458

20

646.3911

Manufactured No

100

Each

22.0000

1

1

646 3911

Shim

**

FEB 0 1 2017

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

cck104

16

126229

16

CCK106

6

126059

6

646.3912

Manufactured No

100

Each

28.0000

4

4

646 3912

Shim

**

FEB 0 1 2017

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK106

8

150715

8

CCK108A

20

151683

20

646.3913

Manufactured No

100

Each

62.0000

1

1

646 3913

Shim

**

FEB 0 1 2017

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK106

62

126060

62

Tuesday, January 17, 2017 11:27:23 AM

Shop Packet Print

Page 8

DQA: _____ Date: _____



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Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

Picklist Print

Tuesday, January 17, 2017 11:27:23 AM

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-11A Purchased No 100 Each 588.0000 10 10

AN3-11A

Bolt

**

DAS
6
9-89

DAS
27
9-89

FEB 01 2017

DAS
28
9-89

Location	Loc Qty	Loc Code
over003	456	
153855	356	
m136192	100	
ST349	132	
153855	132	

AN3-12A Purchased No 100 Each 367.0000 2 2

AN3-12A

Bolt

**

DAS
6
9-89

DAS
27
9-89

FEB 01 2017

DAS
28
9-89

Location	Loc Qty	Loc Code
over003	206	
153854	206	
ST349	161	
m135603	161	

AN3-13A Purchased No 100 Each 82.0000 1 1

AN3-13A

Bolt

**

DAS
6
9-89

DAS
27
9-89

FEB 01 2017

DAS
28
9-89

Location	Loc Qty	Loc Code
GA	16	
m127070	16	
ST349	66	
153845	65	
m136406	1	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐								
Misidentified	☐	Past Due	☐								
				OTHER : _____							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
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Picklist Print

Tuesday, January 17, 2017 11:27:23 AM

Page 12

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-6A
AN3-6A
Bolt

Purchased

No

100

Each

267.0000

2 2

**

DAS
6
9-89

FEB 01 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

over003

188

153844

188

ST349

79

M134955

79

100

Each

27.0000

2 2

**

DAS
6
9-89

FEB 01 2017

AN44-5A

AN44-5A

Eyebolt

Purchased

No

DAS
28
9-89

Location

Loc Qty

Loc Code

ST339

27

153853

3

m135774

12

m136047

12

100

Each

102.0000

2 2

**

DAS
6
9-89

FEB 01 2017

DAS
27
9-89

AN4C7A

AN4C7A

BOLT

Purchased

No

DAS
28
9-89

Location

Loc Qty

Loc Code

OVER002

54

m136295

54

ST345

48

m135864

48

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																					
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Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																										
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Root Cause <table style="width:100%; border: none;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="width:33%;">Pressure/Forced ☐</td> <td style="width:33%;">Temperature/Cure ☐</td> <td style="width:33%;">Power Loss/Surge ☐</td> </tr> <tr> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> </tr> <tr> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Crushing ☐	Countersink ☐	Off-set ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐
Environment ☐	No Re-verification ☐																																																												
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Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐																																																											
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Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐																																																											
OTHER : _____																																																													

Picklist Print

Tuesday, January 17, 2017 11:27:23 AM

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

AN665-34R Purchased No

100 Each 53.0000 2 2

AN665-34R

Clevis

**

DAS
28
9-89

Location

Loc Qty

Loc Code

over008

47

153852

47

ST330

6

M136182

6

CCR264SS3-02 Purchased No

100 Each 208.0000 36 36

CCR264SS3-02

Cherry Rivet

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST321

208

M136047

208

CR3213-5-3 Purchased No

100 Each 172.0000 14 14

CR3213-5-3

Cherry Rivet

**

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK003

100

m136537

100

ST319

72

m135865

72

MS20426AD5-7 Purchased No

100 Each 1,526.000 2 2

MS20426AD5-7

RIVET

**

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK004

703

153848

703

ST311

823

M133922

823

DAS
6
9-89

FEB 0 1 2017

DAS
27
9-89

DAS
6
9-89

FEB 0 1 2017

DAS
27
9-89

DAS
6
9-89

FEB 0 1 2017

DAS
27
9-89

DAS
6
9-89

FEB 0 1 2017

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				
85 85 85-2				85 85 85-2				Completed By
								Lead hand / Supervisor Approval Verification
								QC / QA Coordinator Approval
Root Cause		FAULT CATEGORY						
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ 85 85 85-2 Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐			

Picklist Print

Tuesday, January 17, 2017 11:27:23 AM

Page 14

Work Order ID: 155572
Parent Item: 646.4001
Parent Item Name: AS350 Cable Cutter System

155572
646 4001

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-5.5 Purchased No
MS20470AD5-5 5
Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

782

782.0000

8 8

**

FEB 01 2017

DAS
6
9-89
DAS
27
9-89

MS20470AD5-6 Purchased No
MS20470AD5-6
RIVET

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

672

672.0000

8 8

**

FEB 01 2017

DAS
6
9-89
DAS
27
9-89

MS20470AD5-7 Purchased No
MS20470AD5-7
Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

398

398.0000

3 3

**

FEB 01 2017

DAS
6
9-89
DAS
27
9-89

MS21042-08 MS21042L08 Purchased No
MS21042-08
USE MS21042L08

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

398

0.0000

2 2

**

FEB 01 2017

DAS
6
9-89
DAS
27
9-89

MS21042-3 MS21042L3 Purchased No
MS21042-3
Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

398

0.0000

2 2

**

FEB 01 2017

DAS
6
9-89
DAS
27
9-89

Tuesday, January 17, 2017 11:27:24 AM

Shop Packet Print

Page 14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
		OTHER : _____			

Picklist Print

Tuesday, January 17, 2017 11:27:24 AM

Page 15

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

100

Each

1,970.000

61

61

MS21042L3

Nut

**

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

100

m135945

100

GA

162

m134360

108

m135135

54

OVER007

500

M136554

500

ST303

1208

M136044

108

M136192

600

M136406

500

DAS
6
9-89

FEB 01 2017

DAS
27
9-89

MS21042L4

Purchased

No

100

Each

1,873.000

2

2

MS21042L4

Nut

**

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

18

m133363

18

GA

192

m135058

192

OVER007

500

m136450

500

ST303

1163

m136182

500

m136295

663

DAS
6
9-89

FEB 01 2017

DAS
27
9-89

Tuesday, January 17, 2017 11:27:24 AM

Shop Packet Print

Page 15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, January 17, 2017 11:27:24 AM

Page 16

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

MS21047-3

Purchased

No

100

Each

154.0000

18

18

MS21047-3

Nut Plate

DAS
28
9-89

Location

Loc Qty

Loc Code

ST301

154

m136047

64

m136442

90

**

FEB 0 1 2017

DAS
6
9-89
DAS
27
9-89

MS24693-C278

Purchased

No

100

Each

110.0000

5

5

MS24693-C278

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

100

m136554

100

ST286

10

m135135

10

**

FEB 0 1 2017

DAS
6
9-89
DAS
27
9-89

MS24694-S51

Purchased

No

100

Each

194.0000

5

5

MS24694-S51

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

194

m135442

194

**

FEB 0 1 2017

DAS
6
9-89
DAS
27
9-89

MS24694-S54

Purchased

No

100

Each

279.0000

2

2

MS24694-S54

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

279

153846

157

m135948

122

**

FEB 0 1 2017

DAS
6
9-89
DAS
27
9-89

Tuesday, January 17, 2017 11:27:24 AM

Shop Packet Print

Page 16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
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Root Cause		FAULT CATEGORY																							
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Picklist Print

Tuesday, January 17, 2017 11:27:24 AM

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

MS24694-S55

Purchased

No

100

Each

344.0000

3

3

MS24694-S55

Screw

**

FEB 0 1 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

247

153847

247

ST283

97

m136042

97

MS27039-08-13

Purchased

No

100

Each

400.0000

2

2

MS27039-08-13

Screw

**

FEB 0 1 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

325

153849

325

ST278

75

m136199

75

MS27039-1-10

Purchased

No

100

Each

293.0000

2

2

MS27039-1-10

SCREW

**

FEB 0 1 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

17

m129541

17

ST280

276

m135774

276

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Design ☐	Operator ☐																																																																		
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Picklist Print

Tuesday, January 17, 2017 11:27:24 AM

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-12

Purchased

No

100

Each

136.0000

6

6

MS27039-1-12

Screw

**

FEB 0 1 2017

DAS 6 DAS 27
9-89 9-89

Location

Loc Qty

Loc Code

over006

100

m136537

100

ST280

36

m135566

36

MS27039-1-16

Purchased

No

100

Each

168.0000

24

24

MS27039-1-16

Screw

**

FEB 0 1 2017

DAS 6 DAS 27
9-89 9-89

Location

Loc Qty

Loc Code

over006

100

m136537

100

ST280

68

m135865

18

m136301

50

MS27039-1-19

Purchased

No

100

Each

160.0000

22

22

MS27039-1-19

Screw

**

FEB 0 1 2017

DAS 6 DAS 27
9-89 9-89

Location

Loc Qty

Loc Code

GA

80

m134134

80

ST280

80

m136182

80

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____																		

Picklist Print

Tuesday, January 17, 2017 11:27:24 AM

Page 19

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-20

Purchased

No

100

Each

138.0000

2

2

MS27039-1-20

Screw

**

FEB 01 2017
DAS 27
6 9-89

Location

Loc Qty

Loc Code

ST280

138

124326

38

m136554

100

MS27039-1-21

Purchased

No

100

Each

207.0000

4

4

MS27039-1-21

Screw

**

FEB 01 2017
DAS 27
6 9-89

Location

Loc Qty

Loc Code

ST280

207

m127904

207

NAS1149F0332P

Purchased

No

100

Each

2,510.000

144

144

NAS1149F0332P

Washer

**

FEB 01 2017
DAS 27
6 9-89

Location

Loc Qty

Loc Code

GA

343

m133709

343

ST260a

1800

m136442

1800

ST262

367

m135948

367

NAS1149F0363P

Purchased

No

100

Each

134.0000

2

2

NAS1149F0363P

WASHER

**

FEB 01 2017
DAS 27
6 9-89

Location

Loc Qty

Loc Code

ST262

134

124555

134

Tuesday, January 17, 2017 11:27:24 AM

Shop Packet Print

Page 19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____																						
Misidentified ☐	☐	Past Due ☐																							

Picklist Print

Tuesday, January 17, 2017 11:27:24 AM

Page 20

Work Order ID: 155572

155572

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017

Required Date: 2/7/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P

Purchased

No

100

Each

1,623.000

4

4

NAS1149F0432P

WASHER

DAS
28
9-89

Location

Loc Qty

Loc Code

ST260a

1000

M136442

1000

ST262

623

M135704

623

NAS1149FN832P

Purchased

No

100

Each

1,533.000

4

4

NAS1149FN832P

Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

576

M135058

232

M136182

344

ST263

957

M136182

957

**

FEB 01 2017

DAS
6
9-89
DAS
27
9-89

**

FEB 01 2017

DAS
6
9-89
DAS
6
9-89

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																	
		OTHER : _____																							



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.

05304

SHEET 1 OF 1

DWG NO. 646.4000

REV: C

PREPARED BY J. BECKER

DATE: 02/04/16

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: AS350 CABLE CUTTERS KIT

APPROVED BY:

ENGR. *[Signature]*

MFG *[Signature]*

QC *[Signature]*

EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED F/N 12.

ECR: N/A

ACTION ITEM:
1. N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 155572 MLS
17-01-18

SHEET 1, BOM IS:

12	R	601.1624	8	16	LOCKNUT	MS21042L3	
F/N	TC	PART NUMBER	4006	4005	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY				
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

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NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R. S. HUGHES P/N 021200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

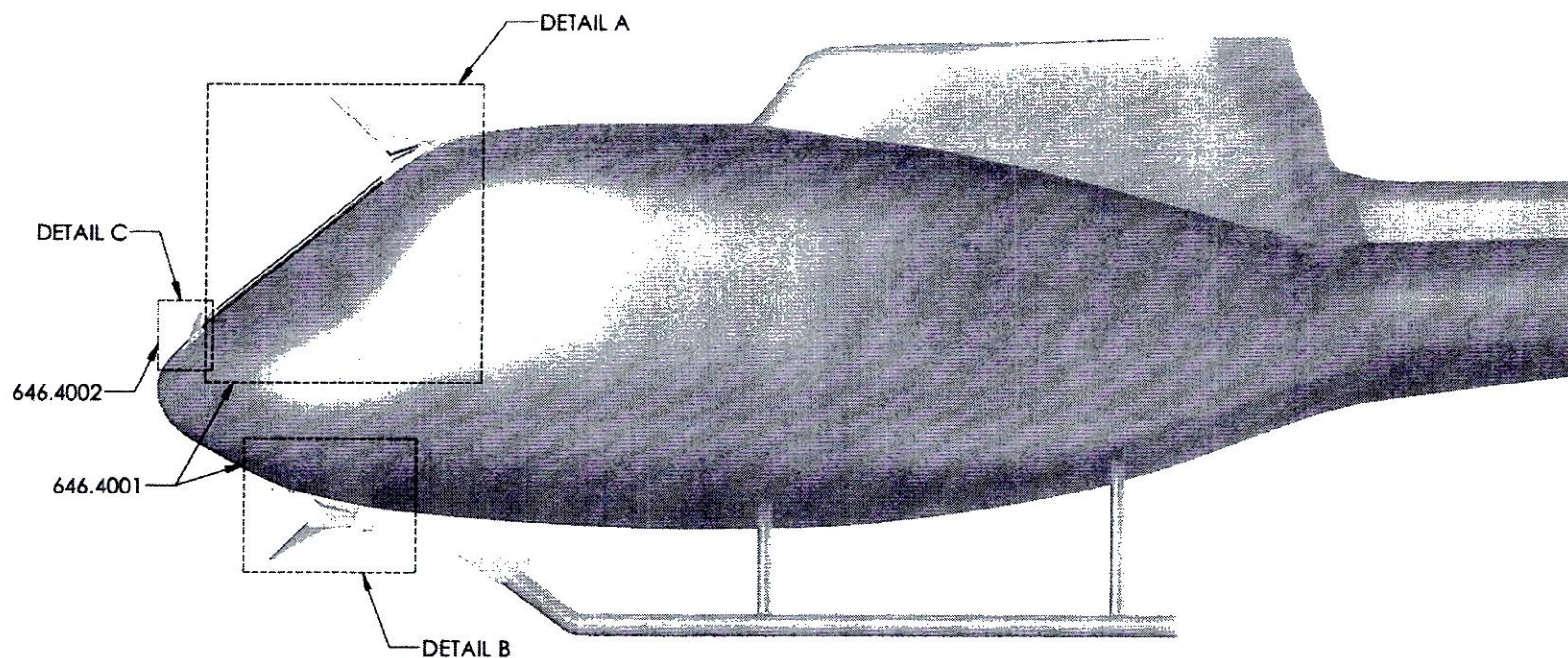
5	5	5	78	601.3875	SCREW	AS350-12A
1	1	1	77	646.9410	SHIM	AS350-12A
	4	4	76	601.2764	WASHER	AS350-12A
	2	2	75	601.2973	LOCKNUT	AS350-12A
	2	2	74	601.2988	SCREW	AS350-12A
	2	2	73	601.2943	LOCKNUT	AS350-12A
	2	2	72	601.3128	NUT	AS350-12A
	2	2	71	601.3209	LOCKNUT	AS350-12A
	4	4	70	601.2638	WASHER	AS350-12A
	2	2	69	601.2669	BOLT	AS350-12A
	2	2	68	601.3119	CLEVIS	AS350-12A
	2	2	67	601.3121	EYE BOLT	AS350-12A
	2	2	66	650.9201	EYE BRACKET ASSY	AS350-12A
REF	REF	REF	65	647.5701	GPS MOUNT KIT	AS350-12A
		2	64	601.3151	WASHER	AS350-12A
		2	63	601.2911	SCREW	AS350-12A
	24	24	62	601.2637	SCREW	AS350-12A
2	2	2	61	601.2763	BOLT	AS350-12A
	3	1	60	646.3913	SHIM	AS350-12A
	4	4	59	646.3912	SHIM	AS350-12A
	1	1	58	646.3911	SHIM	AS350-12A
	4	4	57	646.3910	SHIM	AS350-12A
	5	5	56	600.1013	PRIMER	AS350-12A
	8 FT	8 FT	55	600.0129	VHB TAPE	AS350-12A
	1	1	54	600.1012	SEALANT	AS350-12A
	1	1	53	600.0991	MAGNABOND 6398 PART B	AS350-12A
	1	1	52	600.0990	MAGNABOND 6398 PART A	AS350-12A
6	10	10	51	601.2876	BOLT	AS350-12A
			50	646.3814	WIPER BRACKET	AS350-12A
		2	49	601.2910	SCREW	AS350-12A
	2	2	48	601.1365	SCREW	AS350-12A
	2	2	47	646.3719	DOUBLER	AS350-12A
		2	46	646.3718	CUSTOM WASHER	AS350-12A
	1	1	45	646.3717	DOUBLER	AS350-12A
	22	2	44	601.1948	SCREW	AS350-12A
	2	2	43	601.1952	SCREW	AS350-12A
	4	4	42	601.1956	SCREW	AS350-12A
4006	4003	4004	4003	4002	4001	FIND #
						PART #
						DESCRIPTION
						MATL
						SPEC.

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 05304 (P. 02261, 02262 & 02263)	02/06/2010	P. BRAY
B	INCORPORATED ECN 05304 (P. 02261 & 02262)	11/04/2010	P. BRAY
C	INCORPORATED ECN 05304	09/09/2010	P. BRAY

		2	2	41	601.2829	SCREW	AS350-12A
		2	2	40	601.2831	RIVET	AS350-12A
		1	1	39	646.3716	GAUGE BRACKET	AS350-12A
		6	6	38	601.1953	SCREW	AS350-12A
	2		2	37	646.3715	STRUT DOUBLER	AS350-12A
2	2	2	2	36	601.2824	BOLT	AS350-12A
12	36		36	35	601.2277	RIVET	AS350-12A
6	18		18	34	600.0795	NUT/PLATE	AS350-12A
3	3		3	33	601.2565	RIVET	AS350-12A
1	1		1	32	646.3813	STRUT BRACKET	AS350-12A
4	4		4	31	601.2822	BOLT	AS350-12A
2	2		2	30	646.3812	GUSSET BRACKET	AS350-12A
8	8		8	29	601.2564	RIVET	AS350-12A
1	1		1	28	646.3714	GUSSET	AS350-12A
		1	1	27	646.3810	FILLER	AS350-12A
3	3		3	26	601.2830	SCREW	AS350-12A
2	2		2	25	601.2825	BOLT	AS350-12A
		1	1	24	646.3811	RADIUS BLOCK	AS350-12A
		1	1	23	646.3712	CLIP	AS350-12A
1	1		1	22	646.3711	CLIP	AS350-12A
8	8		8	21	601.2832	RIVET	AS350-12A
14	14		14	20	601.2020	RIVET	AS350-12A
4	6	4	6	10	601.2823	BOLT	AS350-12A
1	1		1	18	601.2827	BOLT	AS350-12A
5	5		5	17	601.2912	SCREW	AS350-12A
1	1		1	16	646.3713	GUSSET	AS350-12A
1	1		1	15	646.3210	SUPPORT	AS350-12A
		1	1	14	646.3710	DOUBLER	AS350-12A
1	1		1	13	646.3110	CHANNEL	AS350-12A
14	10	8	53	6	601.1624	LOCKNUT	AS350-12A
16	32	18	120	16	601.1607	WASHER	AS350-12A
				10	646.3410	UH WIPER DEFLECTOR	AS350-12A
				9	646.3411	RH WIPER DEFLECTOR	AS350-12A
		2	2	8	647.7703	STRUT ASSY	AS350-12A
		2	2	7	647.0112	STRUT BRACKET	AS350-12A
		1	1	6	646.3511	STRUT	AS350-12A
1	1		1	5	646.3510	STRUT	AS350-12A
2	2		2	4	646.3810	BRACKET	AS350-12A
				3	646.2910	DEFLECTOR	AS350-12A
		1	1	2	646.3001	LOWER CUTTER ASSY	AS350-12A
				1	646.3301	UPPER CUTTER ASSY	AS350-12A
X					646.4006	LOWER CUTTER/FORED PROVISIONS	AS350-12A
	X				646.4005	LOWER CUTTER REMOVABLE PROVISIONS	AS350-12A
					646.4004	FIXED PROVISIONS KIT	AS350-12A
		X			646.4003	CABLE CUTTERS WITH/OUT FIXED PROVISIONS	AS350-12A
			X		646.4002	AS350 WIPER DEFLECTOR KIT	AS350-12A
				X	646.4001	AS350 CABLE CUTTERS KIT	AS350-12A
4006	4003	4004	4003	4002	4001	FIND #	PART #
							DESCRIPTION
							MATL
							SPEC.

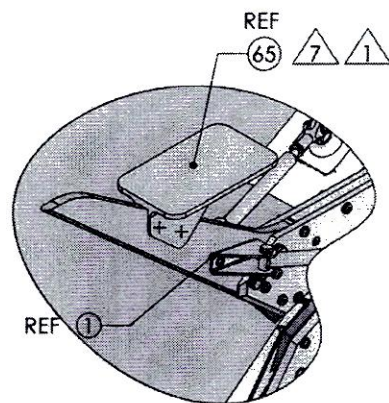
QTY		PARTS LIST	
NEXT ASSY (S)		DART AEROSPACE 3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760) 724-5300	
CHECKED BY: [] DRAWN BY: [] IN CHARGE: [] DATE: [] APPROVAL: [] P. BRAY		AS350 CABLE CUTTERS KIT SCALE: NONE SHEET: 1 OF 5	

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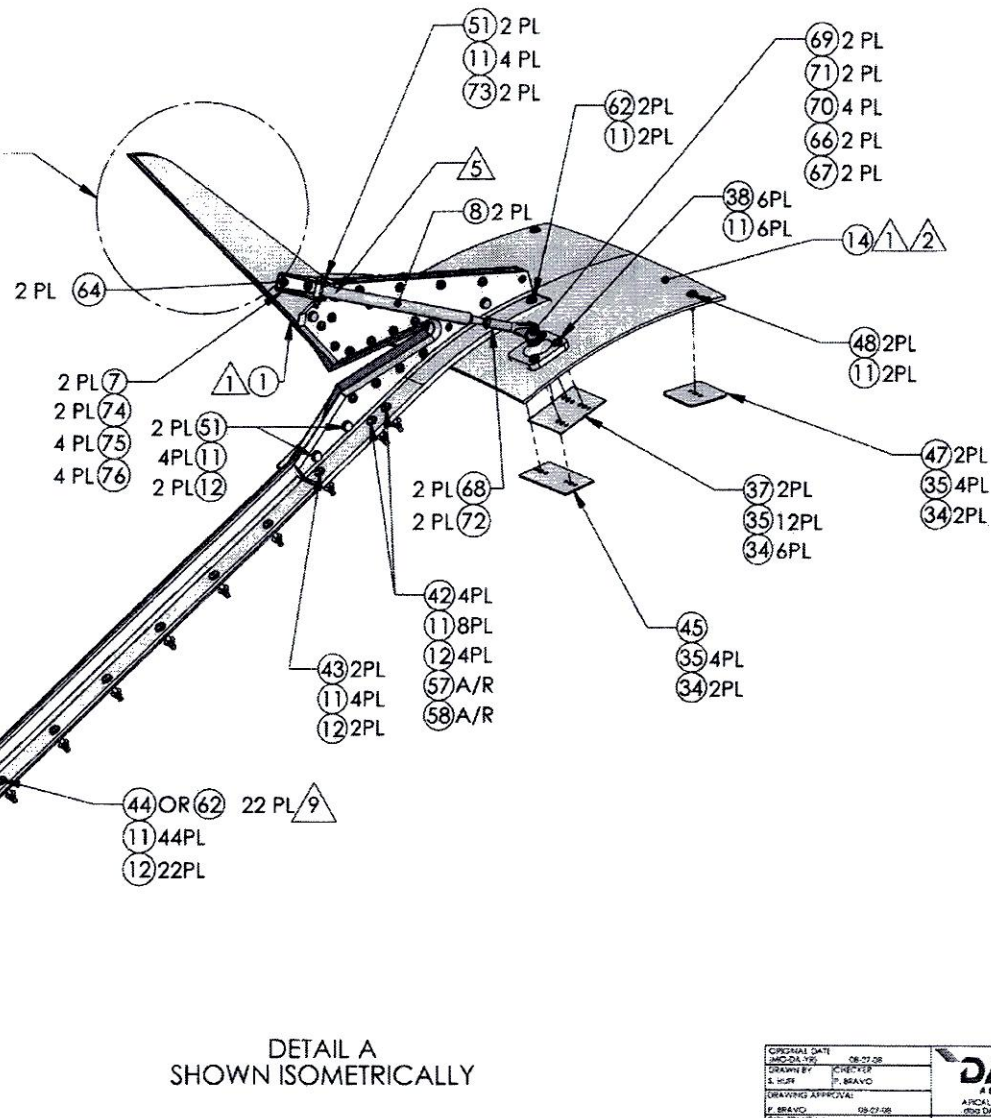
ORIGINAL DATE 08-27-08		3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760)-724-5300	
DRAWN BY J. HUNT		CHECKED BY P. BRAVO	
DRAWING APPROVAL P. BRAVO 08-27-08		CONTRACT NO.	
DART AEROSPACE APICAL INDUSTRIES INC. DDA DART AEROSPACE			
AS350 CABLE CUTTERS KIT			
SIZE B	DWG. CODE 07M76	DWG. NO. 646.4000	REV. C
SCALE NONE		SHEET 2 OF 5	

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DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

DETAIL D



DETAIL A
SHOWN ISOMETRICALLY

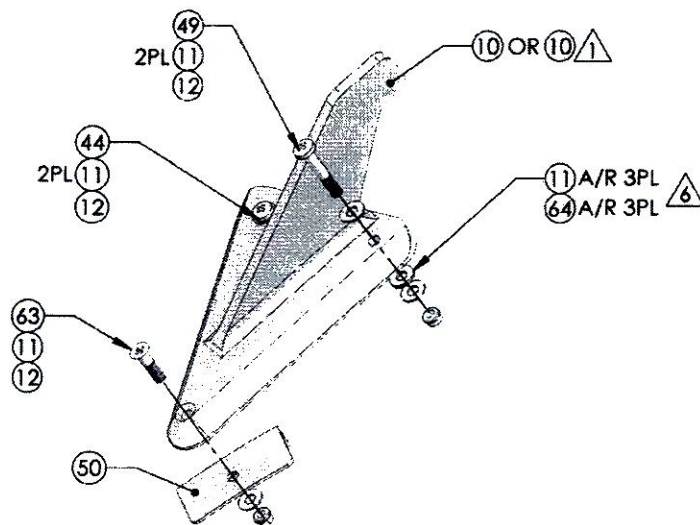
OPERATIONAL DATE 08-01-08	3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760)-724-5300
DRAWN BY S. HORN	DESIGNED BY P. BRAVO
DRAWING APPROVAL P. BRAVO	CONTRACT NO. 08-07-08
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 3 PLACE DECIMALS ±.001 ANGLES ± .1°	
SHEET B	CAGE CODE D7M26
DATE 08-01-08	REV C
SCALE NONE	
SHEET 3 OF 3	

DART
AEROSPACE
AFICAL INDUSTRIES, INC.
DBA DART AEROSPACE

AS350 CABLE CUTTERS KIT

646 4000

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 DDA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPRESS
 WRITTEN PERMISSION OF APICAL INDUSTRIES DDA DART AEROSPACE IS PROHIBITED.



DETAIL C
 LH SHOWN EXPLODED
 RH OPPOSITE

ORIGINAL DATE 08-27-08		3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760)-724-5300	
DRAWN BY S. HUNT		CHECKED BY P. BRADY	
DRAWING APPROVAL S. HUNT		APPROVAL P. BRADY	
CONTRACT NO.		AS350 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS: ±0.10 3 PLACE DECIMALS: ±0.05 ANGLES: ±1°		REV 8 07/02/06	REV C 646.4000
SCALE: NONE		SHEET: 5 OF 5	

Work Order ID 155572

Tuesday, January 31, 2017 12:53:55 PM

155572

Page 1

Item ID: 646.4001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AS350 Cable Cutter System

Start Date: 1/31/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 2/7/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

646.4000

C1

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP 646.4001

DAS
21
9-89

JAN 31 2017

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

